

Title (en)  
NEEDLELESS VALVE

Title (de)  
NADELLOSES VENTIL

Title (fr)  
SOUPAPE SANS AIGUILLE

Publication  
**EP 1044033 A2 20001018 (EN)**

Application  
**EP 98944635 A 19980831**

Priority  
• US 9818068 W 19980831  
• US 92991997 A 19970915

Abstract (en)  
[origin: US2005121638A1] A needless valve is described which avoids the suctioning problems of the prior needless devices upon deactivation and which preferably provides a positive self-purging effect. The valve is self-purging at the end of an administration cycle, avoiding clogging of attached catheters or other devices, and ensures that substantially all of liquid received into the valve is delivered to the receiver. The valve is also extremely simple in design and easy to construct and assemble, since it consists of only three pieces. The valve has a base with a connector for fluid communication attachment to tubing or other device, a solid elongated fluid channeling rod, and an internal fluid flow conduit; a flexible hollow expandable and contractible plug fitting over and moveable along the rod; and a tubular housing fitting over the plug and attached to the base. When the valve is activated by insertion of a nozzle of a fluid source, the rod and plug wall cooperate so that as the plug retracts along the rod, it is stretched and its interior expanded. Upon deactivation, the plug contracts, the interior volume decreases, and the resiliant plug wall forces residual fluid within the valve to be expelled through the outlet, purging the residual fluid from the valve. No negative pressure is formed, so no suctioning of blood or other fluid from a patient or receiver occurs.

IPC 1-7  
**A61M 39/00**

IPC 8 full level  
**A61M 5/168** (2006.01); **A61M 39/00** (2006.01); **A61M 39/26** (2006.01)

CPC (source: EP KR US)  
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US8757590B2; US10112039B2

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**WO 9913937 A2 19990325; WO 9913937 A3 19990603**; AT E443536 T1 20091015; AU 747578 B2 20020516; AU 9213298 A 19990405; BR 9812460 A 20000919; CA 2303084 A1 19990325; CA 2303084 C 20080715; CN 1270533 A 20001018; CY 1109674 T1 20140813; DE 69841178 D1 20091105; DK 1044033 T3 20100111; EP 1044033 A2 20001018; EP 1044033 B1 20090923; ES 2331939 T3 20100120; HK 1032209 A1 20010713; IL 135057 A0 20010520; JP 2001516626 A 20011002; JP 4184597 B2 20081119; KR 100540861 B1 20060112; KR 20010015585 A 20010226; NZ 503168 A 20021220; NZ 529166 A 20050729; PT 1044033 E 20091119; US 2001045539 A1 20011129; US 2003183795 A1 20031002; US 2005121638 A1 20050609; US 6029946 A 20000229; US 6290206 B1 20010918; US 6541802 B2 20030401; US 6840501 B2 20050111

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